## BIOLOGY AND ECOLOGY OF ORIENTAL TERMITES (ISOPTERA)

No. 1.—ODONTOTERMES PARVIDENS HOLMG. AND HOLMG. SEVERELY DAMAGING THE BARK AND CONTRIBUTING TO THE DEATH OF STANDING TEAK TREES IN UTTAR PRADESH, INDIA

BY

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(With two tables and a plate)

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## I. INTRODUCTION

The termite, Odontotermes parvidens Holmgren & Holmgren, is a bark feeder and makes mud-plaster coverings on the trunks of trees; it does not make narrow, tubular mud-galleries like Odontotermes obesus (Rambur), the common mound-building termite. Beneath these mud-coverings the workers feed on the bark and sometimes even damage the sapwood of standing trees. O. parvidens does not build mounds but breeds in underground nests. It has been recorded as damaging the following timber species in India: Duabanga sonneratioides Ham., Melanorrhoea glabra Wall., Pinus longifolia Roxb., Shorea robusta Gaerten f. and Sterculia villosa Roxb. (Beeson, 1941, p. 552). It is also a serious pest of the roots of Cajanus cajan Linn. (Millsp.) (=indicus Spr.) (Rattanlal & Menon, 1953, pp. 83-84), and in my files I have a record of it on Litsaea polyantha Juss. in Assam. The present is the first record from teak, Tectona grandis Linn. f.

O. parvidens occurs practically all over India and goes up to an elevation of about 6,000 ft. above sea-level in the Himalayas.

## II. OBSERVATIONS AND CONCLUSIONS

In May 1952, Dr. K. Kadambi, Assistant Central Silviculturist-kindly informed me that teak (*Tectona grandis* Linn. f.) was dying in the Pharanda Range, Gorakhpur Forest Division, Uttar Pradesh, and that the bark showed signs of white-ant attack. Sometime later, specimens of damaged teak were received from the Range Officer,